






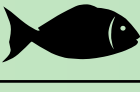



ROADMAP

SEAWEED FOR FOOD



AMBITION

Fresh seaweed can be used directly without prior extraction of proteins or other elements. Applications are possible across diverse food products, to produce hybrid meat and fish, or as an ingredient in bakery and dairy products, or even as a meat substitute. Including fresh seaweed in for example minced meat not only provides functional benefits but can help reduce associated water usage, GHG emissions, land-use and promote healthy oceans.

	Required fresh seaweed for Food products in the EU		
	2025	2035	2050
	10.530 ton	52.650 ton	140.400 ton
	9.990 ton	74.925 ton	133.200 ton
	29.800 ton	93.125 ton	149.000 ton
	6.750 ton	33.750 ton	90.000 ton
	665 ton	10.050 ton	63.250 ton
	35.200 ton	220.000 ton	572.000 ton
	190.400 ton	476.000 ton	928.200 ton
Total	283.335 ton	960.500 ton	2.076.050 ton

The European Seaweed Industry aims to supply the hybrid meat and fish, meat alternative, dairy, and bakery markets with unprocessed fresh seaweed as an ingredient to promote healthier and more sustainable diets, improve food security, and support European jobs.

2025 This ambition requires more than 2 mln ton-wet seaweed in 2050 **2050**

KEY INSIGHTS



High cost price requires smart market choice

(Farmed) seaweed and blends incorporating them remain relatively expensive and therefore currently most easily used in higher priced meat like beef.



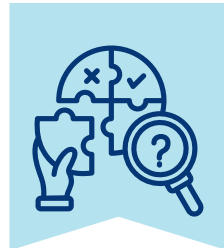
Ease of use and functionality

The unique properties of seaweed make it possible to replace up to 50% of meat with plant-based alternatives, while preserving taste, texture and enriching the product with valuable nutrients.



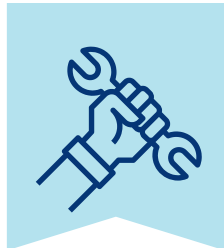
Supply as limiting factor

When successful food applications need to be scaled up, the limited capacity of both cultivation and wild harvesting supply chains in the EU may be an obstacle.



Sustainability and Health as key benefits

Seaweed as low-carbon ingredient is marketable not only for the sustainability benefits it brings but also for science backed health benefits it brings to consumers.



Hybrid meat offer fastest route to market

Seaweed (blends), which are allergen free, are easily processed with existing meat infrastructure and can be mixed with vegetables to allow flexibility in volume and price.

RECOMMENDED INDUSTRY ACTION

These actions could be followed-up in Joint Industry Projects and/or by research & innovation projects in Europe



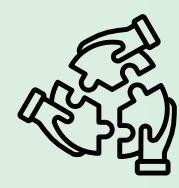
Collective advocacy is needed to obtain government support (e.g. **production subsidy**) that will help overcome price differences and accelerate inclusion in relevant policies (e.g. Farm to Fork).



Strengthen **scientific research** into the **health benefits** of seaweed products and blends in order to substantiate product claims with evidence.



Encourage **targeted breeding** of seaweed with a focus on **desired functionalities**, such as improved nutritional values and reduced colour intensity.



Promote **successful, economically viable** seaweed cases towards various stakeholders, such as **policymakers** and **market parties**, to act as a catalyst and further the development of the seaweed industry.